

Winter Feed For Your Stock



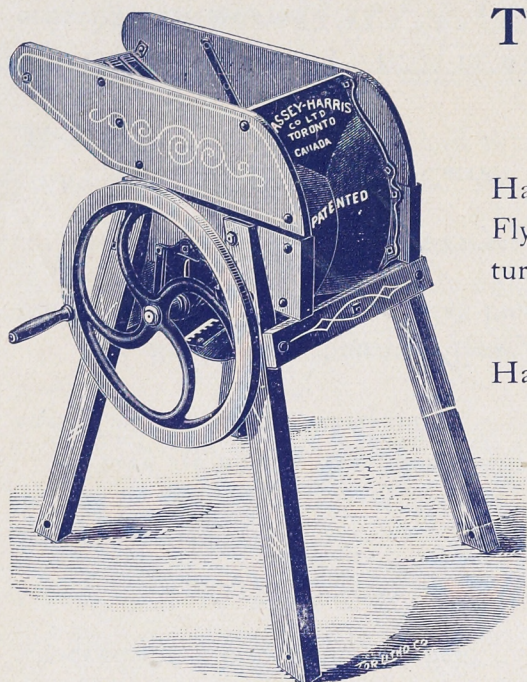
Massey-Harris Co., Limited.

Head Offices—Toronto, Canada.

— Branches at —

Montreal,	-	Moncton,	-	Winnipeg,	-	Regina,	-	Saskatoon,
Swift Current,	-	Yorkton,	-	Calgary	-	Edmonton.		

— Agencies Everywhere —



The Massey-Harris No. 1 Pulper

Has Concave Cylinder, combined Fly Wheel and Pulley or can be turned by hand.

It is substantially built, the Hardwood Frame being firmly bolted together. Being fitted with Roller Bearings, it runs very easily.

By simply reversing the Knives, it can be used for either slicing or pulping.

ROOTTS form an important part of the rations recommended by various Agricultural Colleges for feeding Dairy Cattle.

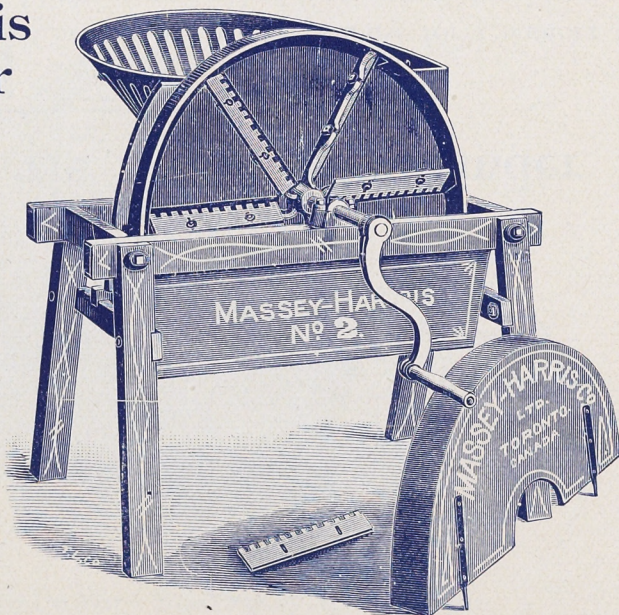
To be of the most value as feed it is necessary that they be properly shredded or sliced, and a Massey-Harris Pulper does this work to perfection.

These Pulpers and our Feed Cutters are designed and built with the same thoroughness that characterizes all Massey-Harris Implements and will be found the most satisfactory Cutters you can buy.

Massey-Harris No. 2 Pulper

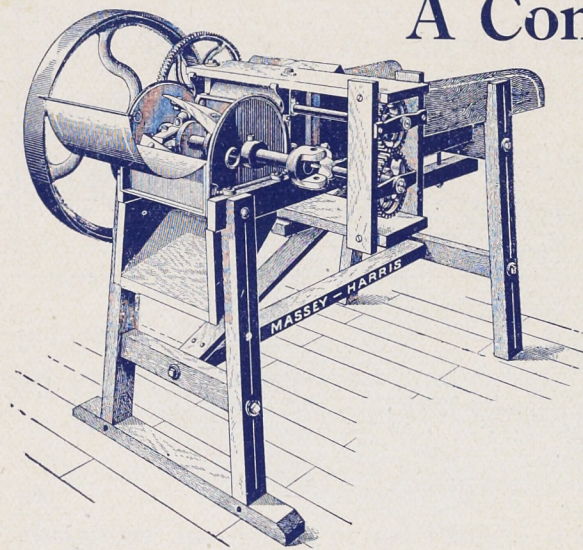
Is of the Side-Wheel Type. It is made with the same thoroughness which characterizes the No. 1 — Hardwood Frame, Roller Bearings and Reversible Knives for cutting and pulping.

A Crank is furnished on this machine but a Pulley can be substituted if it is desired to run by power.



A Complete Line of Reliable Feed Cutters

A Cutter to meet every requirement for the large farm or the small, Cutters for Hand or Power use, but every one is built to give the best possible service.



Massey-Harris Cummings' Cutter

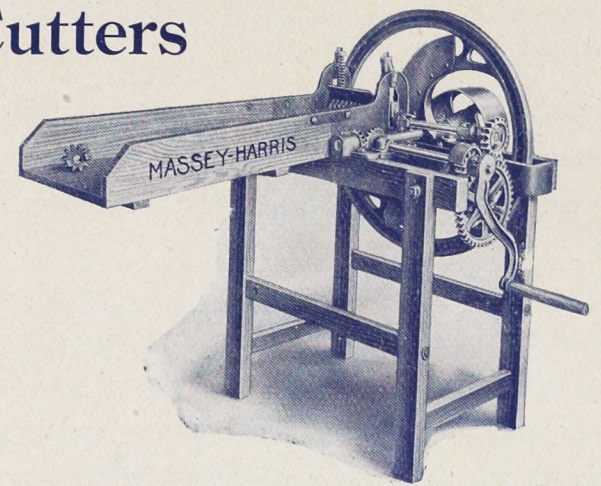
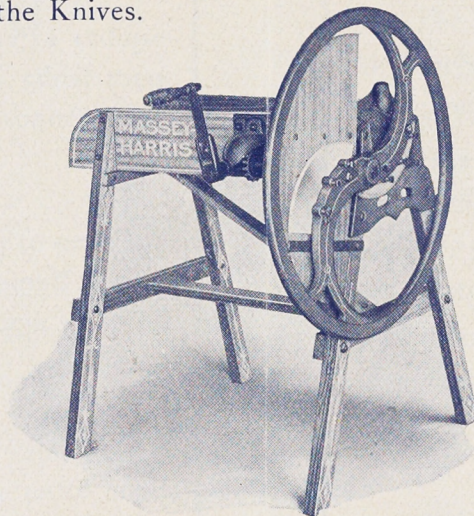
This is a combination Hand and Power Machine. Can be fitted with Knuckle or Pulley as desired.

It has a substantial Hardwood Frame, Roller Bearings, a heavy Fly Wheel, and four Spiral Knives which are mounted in such manner as to be readily adjusted or removed for sharpening.

Gear-driven Feed Rolls which automatically conform to varying amounts of straw or other material, give positive feed at all times. The cut can be changed by means of different Gears to various lengths as follows:— $\frac{3}{8}$, $\frac{5}{8}$, $\frac{7}{8}$, $1\frac{1}{4}$, $1\frac{3}{4}$ or $2\frac{1}{4}$ in.

Massey-Harris No. 9 Cutter

A convenient, substantial Cutter for hand use. Has two easily-adjusted Knives mounted on the Fly Wheel; shear cut; can be turned by Crank at the side or the Handle can be bolted to the Fly Wheel; Feed Rolls have Spring Tension; a Guard prevents injury from coming in contact with the Knives.



Massey-Harris No. 10 Cutter

A handy Cutter, for Hand or Power. The Frame is made of Hardwood securely bolted together; Curved Knives give a shear cut; Positive Feed is secured by the Spring-Controlled Rolls.

Length of cut can be changed from $\frac{5}{8}$ -inch to 1-inch.

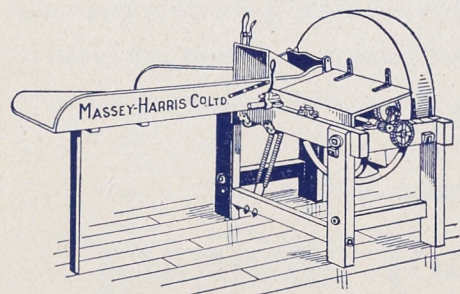
The Main Shaft runs in Roller Bearings, making it easy to turn.

Can be operated by Crank at the side or end as desired, two Cranks being supplied, or can be furnished with a 9-inch Pulley on the Main Shaft if wanted to run by Power.

Massey-Harris No. 2 Cutter

A large powerful Cutter suitable for large farms and is also intended for cutting Ensilage. It is furnished with Elevating Carrier as shown opposite, or as a simple machine without Carrier which can be operated by a Crank when only a small quantity of straw is to be cut.

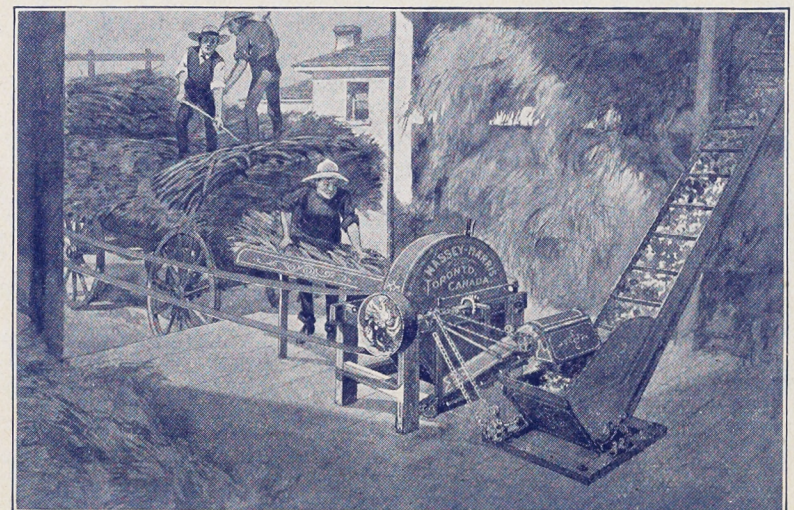
It has a substantial Hardwood Frame and is fitted with Roller Bearings. Feed Rollers have Tension Springs which cause them to grip the stalks or straw in a way to give positive feed and allowing them to yield to anything which might cause breakage. A convenient Lever gives the operator perfect control of the Feed Rolls, permitting of their instant stopping or reversing, thus making it a safe machine to operate.

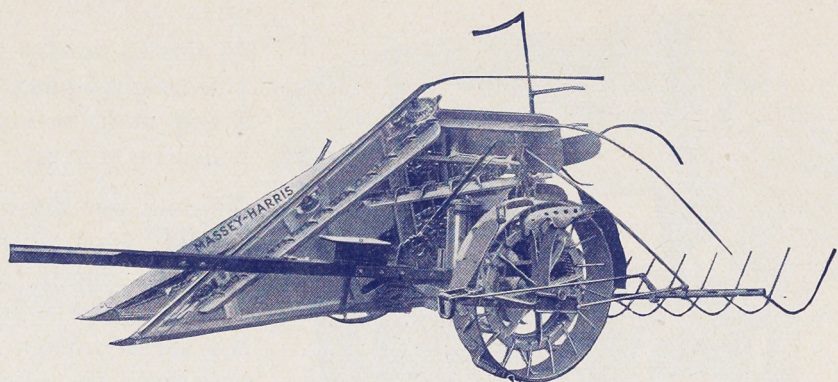


Will cut in six different lengths, as follows:— $\frac{7}{16}$, $\frac{5}{8}$, $\frac{7}{8}$, $1\frac{1}{2}$, $2\frac{1}{8}$ or 3 inches, changes from one to the other being easily made.

Massey-Harris No. 2 Cutter with Carrier

The No. 2 Cutter can be fitted with Carrier as shown below for delivering the straw or corn into the mow, or into a small Silo. The Carrier can be set to discharge straight-a-way or to the right or left.





Massey-Harris No. 4 Corn Binder

The Massey-Harris No. 4 Corn Binder has been in use for a number of years harvesting heavy and light crops and has given splendid satisfaction.

The Main Frame is of Steel in one piece and wide enough to permit the machine to work easily on side hills. Ours is the only machine of this type having the Pole attached to the Frame on the inside of Wheel—this divides the weight and work between Wheel and operator on one side and Elevators and Gearing on the other, with the Binder Attachment directly in the line of draft. Always in perfect balance. No side draft.

We use a large Drive Wheel which is 40 inches in diameter, with a wide Rim and Angle Steel Traction Lugs—giving great power. Dust-Proof Roller Bearings on Hub of Wheel reduce wear and draft.

Cutting Apparatus includes two Stationary Side Knives that give the stalks a shear cut and the regular Sickle or Smooth knife finishes the cutting. The corn is cut clean and not torn.

The Gathering Chains with Stationary Fingers pick up the row knocked down in opening the field.

The Conveyor Chains with Folding Fingers carry the corn to the Binder Attachment.

There are no packers; as a result, there is practically no loss from ears of corn being knocked off.

The Binder Attachment is Gear driven—binds 32 inches from the butts or as low as 18 inches. Can bind above or below the ears.

All Levers are convenient to the operator.

The Massey-Harris Steel Carrier takes five bundles, and trips from the Seat.

The machine is only 5 ft. 11 in. wide and will easily pass through the ordinary farm gateway.

Ensilage for Winter Feed

Ensilage is often spoken of as "Winter Pasture," and the term is quite appropriate since it most nearly takes the place of pasture grass which is the ideal feed for live stock, when properly supplemented by a certain amount of grain or its equivalent.

The Silo preserves a larger proportion of the food materials of the original fodder for the feeding of farm animals than is possible by any other system of preservation now known. When made into hay, the various grasses and other green crops lose a certain amount of the food material contained therein, both on account of fermentations which take place while the plants are drying out or being cured, and the unavoidable losses of leaves and other tender parts.

In the case of Indian Corn, left in the shock or barn, the losses are considerable, owing to the coarse stalks of the plant and the large number of air cells in the pith of these, the average loss in food value having been estimated at about 25 per cent.

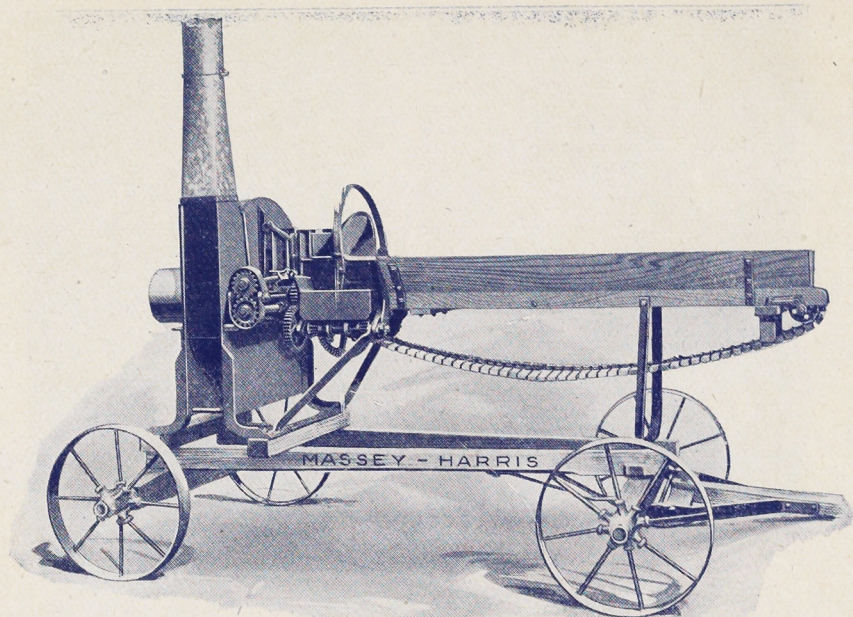
On the other hand, when a Silo is used, there is practically no loss, the whole food value being retained in palatable form, providing a feed which is not only very nutritious but also does a great deal to keep the stock in good healthy condition.

Less room is required for the storage in a Silo of the product from an acre of land than in cured condition in a barn. Hay of equal food value requires about three times the space, while dry cornstalks require about 10 times the space.

While rainy weather is a disadvantage in filling Silos, as in most farm operations, the quality of the ensilage is not affected as in the case of hay.

When the corn is right for cutting, the sooner it is put into the Silo the better, and this is best accomplished by the use of Massey-Harris Implements.

A Massey-Harris Corn Binder to cut the crop, and a Massey-Harris Cutter driven by Massey-Harris Gasoline Engine will enable you to handle the crop
Quickly, Economically and Satisfactorily.



Massey-Harris No. 5 Ensilage Cutter

This Cutter is intended for the individual farmer. While it can be run with a 6 Horse-Power Engine for light work, it is better to use a larger Engine, say about 10 Horse-Power, and absolutely necessary to do so if the Cutter is to be operated at full capacity. If running with a small Engine, it is well to cut the bands, and, by careful feeding, very satisfactory results will be obtained, but naturally, the same results could not be expected as from the use of a larger Engine. It has a capacity for cutting from three to eight tons per hour, depending on the length of cut and amount of power used.

It is nearly all Steel, having Steel Casing and Steel Legs, making a very substantial construction. Either two or four Knives may be used and the length of cut may be easily regulated to $\frac{1}{4}$ in., $\frac{1}{2}$ in., $\frac{3}{4}$ in., or $1\frac{1}{2}$ in. Half the top of the Casing is hinged and the other half can be removed by taking out four bolts, giving easy access to the Head. The Main Bearings are adjustable to move the Head to or from the Reversible Steel Shear Plate and the Knives are also adjustable. Bearings are well babbited. The Cutter Head is heavy enough to act as a Fly Wheel and is carefully balanced.

The Safety Yoke above the Throat makes it possible for the operator to stop or reverse the Feed Rolls by a slight pressure of his arm or body—we have considered "Safety First."

Furnished with or without Transport Truck.

Massey-Harris Gasoline Engines

The Cylinder, Cylinder Head and Water Jacket are cast in one piece—no gaskets or packed joints about the Cylinder or water Jacket to leak.

Gasoline Storage is in the hollow, Cast-Iron Base, which is a part of the Main Frame and is absolutely tight—no danger from leakage.

The large water space around Cylinder and Valves prevents overheating.

The Crank Shaft is forged from a solid billet of Open-Hearth Steel.

Main Bearings are extra large and set on an angle of 30°.

Connecting Rod is extra heavy and of I-Beam Section. The Bearings at both ends of Rod are provided with suitable means for taking up the wear and keeping these important Bearings always tight.

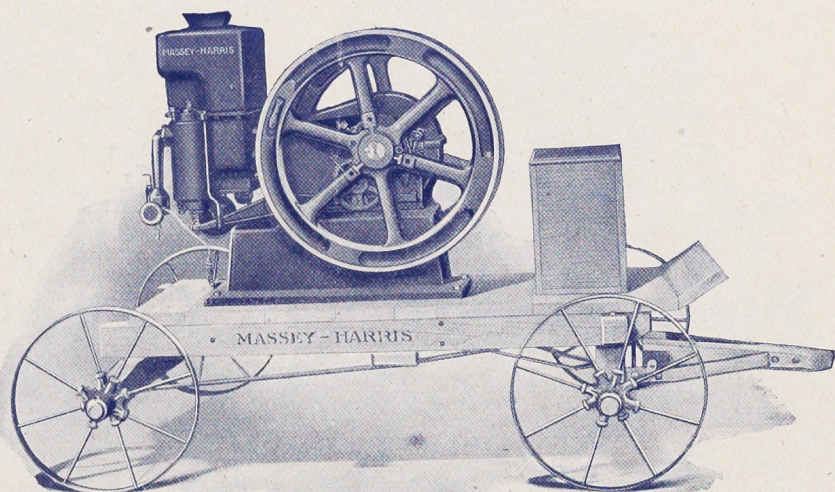
Jump Spark Ignition with Spark Plug in the end of the Cylinder, ensures perfect and rapid combustion.

The Inlet and Exhaust Valves are of the vertical type, of large size. The Inlet Valve is mounted in a Removable Valve Cage, held in place by two screws, on the removal of which the Valves may be taken out without affecting any adjustment whatever, and can be easily replaced.

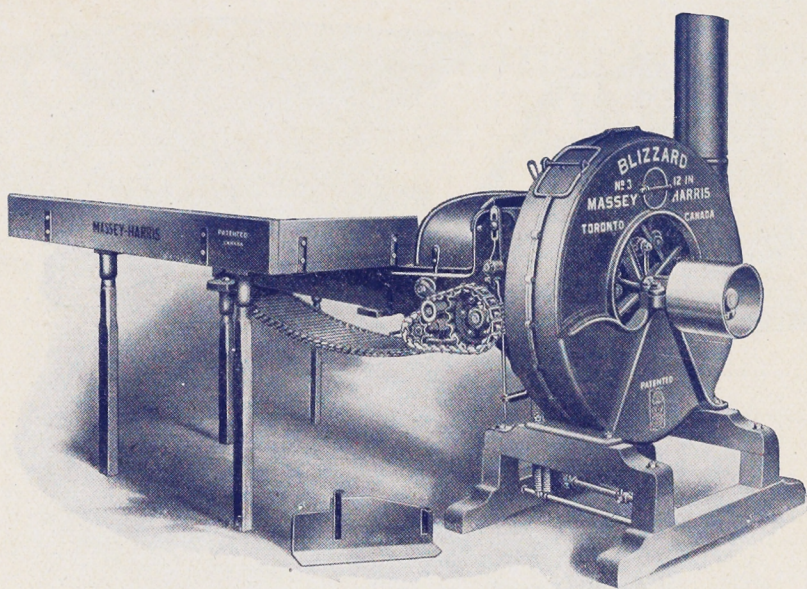
The Exhaust Valve is positively operated by a Single Lever. The Inlet Valve is automatically locked to its seat on idle stroke—no complicated mechanism to get out of order.

Effective Governor—On idle stroke no charge is drawn in and there is no spark.

The Mixer has no moving parts and Gasoline Pump is eliminated, the suction of the Piston drawing in the charge. This is the most efficient and economical Mixer in its consumption of gasoline that it is possible to make.



1½ to 20 Horse-Power—Stationary or Portable.



Massey-Harris “Blizzard” Ensilage Cutter

This Cutter is intended for use on large farms or for those doing Silo filling for others, being designed with special reference to large capacity and with ample strength for rough usage.

The Main Frame or Blower Case is of an improved type, and is made extra heavy and strong so as to provide a solid mounting for the various parts, holding them in proper relation one with another. This is largely responsible for the smooth running and durability of this Cutter.



Power is applied by means of a Pulley on the Main Shaft, and this Shaft should run 800 to 1000 revolutions per minute. The Pulley has 8-in. leather-covered face and can be supplied in either of two diameters, viz., 10 or 12 inches. Under ordinary conditions an Engine of from 12 to 15 Horse-Power is required to properly operate this Cutter, although in very heavy work 20 Horse-Power will be found advisable. It will cut from 6 to 12 tons per hour, depending on the size and condition of the corn, length of cut, etc. This is a very conservative estimate as we have reports from many farmers who state that they are cutting greatly in excess of these figures.

The Head is very heavy, giving great strength and also giving the effect of a Fly Wheel. It is carefully balanced and the Shaft runs in long, well-babbitted Bearings.



The Feed Rolls have Tension Springs adjusting themselves automatically to handle light or heavy stalks, also preventing breakage. A Feed Table is provided on which the stalks are thrown, and from where they can be easily placed on the Endless Carrier which delivers them to the Feed Rolls.



The Massey-Harris Ensilage Cutter can be adjusted to cut four different lengths:— $\frac{1}{4}$ in., $\frac{1}{2}$ in., $\frac{3}{4}$ in., or $1\frac{1}{2}$ in.



The Knives may be adjusted independently, and are easily removed for sharpening. If it is desired to shred dry fodder, Shredding Knives can be furnished, and, if desired, both Cutting and Shredding Knives may be used, making a combination Cutting and Shredding Head.



The Blower has great power and capacity, and the improved form of Deflector Hood delivers the ensilage in any direction and works without clogging.



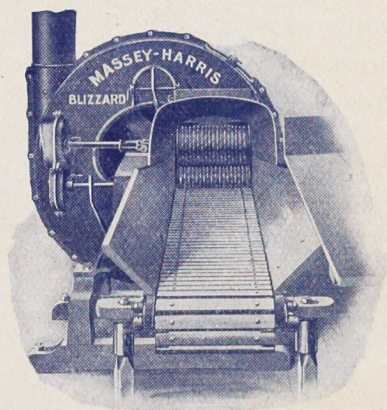
When desired, the Blower Pipe can be furnished with a Silo Filler consisting of several lengths of Pipe flexibly connected and hanging down into the Silo in such a manner as to make it an easy matter to distribute the ensilage evenly to all parts of the Silo.



The Feed Rolls can be instantly stopped or reversed, and the Rolls, Knives and Gears are covered, making it a safe machine to use.



Substantial Transport Truck,
Similar to the one used on
No. 5 Cutter shown above,
only larger and stronger,
supplied when wanted.



**Massey-Harris No. 1
Grinder with Bagger
Attachment.**



The increased Food Value of ground feed over whole grain is good reason for its use.

Many farmers claim that by substituting ground feed for unground, there is a saving of from one-fifth to one-third of the grain and better results are obtained.

Massey-Harris Grinders

The Burrs are made of an especially hard mixture and are reversible, being cut and dressed both sides by special machinery—always in perfect trim.

The Stationary Burr is bolted to the Cover of the Housing by four bolts, each of which has two Spiral Springs, one within the other, to give flexibility.

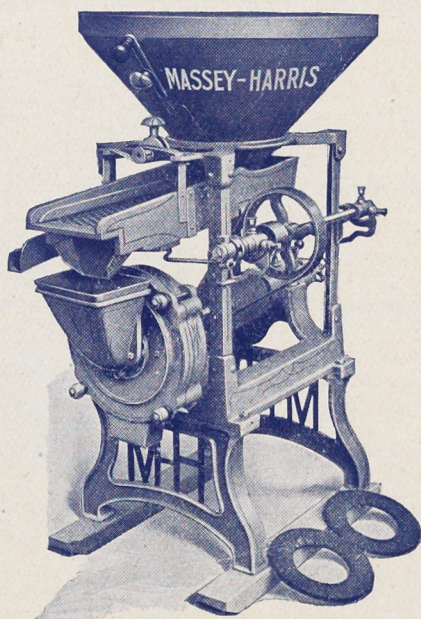
Burrs, Head and Pulley are perfectly balanced to ensure smooth running.

A quick and positive Adjustment is provided for setting the Plates to grind fine or coarse, and Patent Quick-Relief Lever enables the operator to instantly stop or start the grinding without affecting the Adjustment—ONCE SET ALWAYS SET.

A Safety Break Pin automatically relieves the Burrs if any hard substance gets in.

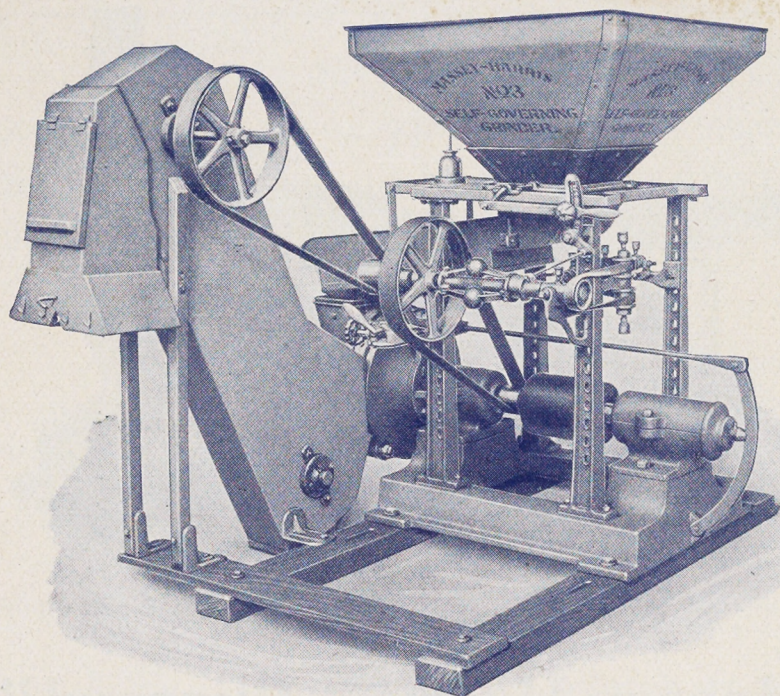
The Main Shaft Bearings are of ample size and well babbitted, and an improved Friction Block takes the end thrust.

The Patent Raising and Lowering Device for Feed Spout is a great improvement. Feed Spout has two Sieves, one for carrying off straws, stones, etc., the other for removing sand and dirt.



For Dimensions, see next Page.

No. 2 Grinder



Massey-Harris No. 3 Self-Governing Grinder with Bagger Attachment.

The No. 3 Grinder for Mill use

In addition to what has been said regarding the Nos. 1, 2 and 3 Grinders, the following applies to the No. 3 only:—

It is easy to regulate and does not require the services of an experienced miller to run it. It can be run from above, below, or from either side.

An entirely New Feature, found only on the Massey-Harris is the Patented, Automatic Grain Governor. This regulates the flow of grain according to the power applied, thus making it especially suitable where the power is unsteady.

Made of Steel, suspended by four flat Steel Springs and with an end shake in place of the usual side shake, the Feed Spout is practically indestructible.

The Hopper is all Steel with Steel Angles re-inforcing the corners.

The Revolving Head is made of Cast Steel, strongly ribbed, balanced and trued. No. danger of bursting under high speed.

The Pressure Screw and Quick-Relief Lever are conveniently located at the front of the machine.

TABLE OF DIMENSIONS OF MASSEY-HARRIS GRINDERS.

Style of Mill	Size of Mill	Dia. of Grinding Plates.	Weight without Bagger.	Pulley Dia. and Width		Speed	Horse Power	Floor Space	Height of Mach.	Size of Pulley on Engine
						Revolutions per Minute				
No. 1	6½	6½	195	4	x 5	2000 to 2500	2 to 3	3 ft. x 2½ ft.	3 3	20
No. 1	8	8	208	4	x 5	2000 to 2500	3 to 6	3 ft. x 2½ ft.	3 3	20
No. 1	9	9	236	4	x 5	2300 to 2500	4 to 6	3 ft. x 2½ ft.	3 3	20
No. 2	9¼	9¼	380	5½	x 6½	2300 to 3000	6 to 8	3 ft. 6 in. x 2 ft. 8 in.	3 4	16
No. 2	10½	10½	400	5½	x 6½	2300 to 3000	6 to 10	3 ft. 6 in. x 2 ft. 8 in.	3 4	16
No. 3	13	13	1204	7	x 8	3300 to 3500	15 to 25	5 ft. x 4 ft.	4 6	
No. 3	15	15	1427	8	x 9	3300 to 3500	25 to 40	5½ ft. x 4 ft. 5 in.	5 0	

The Capacity of the Grinding Mills depends on Speed, Power, fineness of grinding and the kind of Grain ground.

NOTE.—Speeding Jack for No. 2 Grinder has 6 in. and 14 in. Pulley.